WHAT IS CLAIMED IS:

1. A vasoocclusive device that is adapted to be inserted into a portion of a vasculature for occluding a portion of the vasculature for use in interventional therapy and vascular surgery, comprising:

at least one strand of a flexible material formed to have a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable configuration for framing or occluding the desired part of the vasculature to be treated, said operable configuration including a first portion configured to frame or occlude a part of the vasculature to be treated and a second non linear portion configured to engage an artery wall for securing the occluding device in the artery system of the vasculature.

2. The vasoocclusive device of Claim 1, wherein the portion for securing the occluding device in an artery system of the vasculature comprises an anchor portion of the second operable configuration to secure the occluding portion of the device in the artery system of the vasculature.

3. The vasoocclusive device of Claim 2, wherein the anchor portion comprises a plurality of extending loops along a longitudinal axis to thereby provide contact surface area for anchoring the occluding portion of the device in the artery system of the vasculature.

4. The vasoocclusive device of Claim 1, further comprising a second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable, coiled shape for filling and reinforcing the desired portion of the

vasculature when the vasoocclusive device is implanted at the site in the vasculature to be treated.

5. The vasoocclusive device of Claim 1, further comprising a second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable, substantially helical coil shape for filling and reinforcing the desired portion of the vasculature when the vasoocclusive device is implanted at the site in the vasculature to be treated.

6. The vasoocclusive device of Claim 1, wherein said at least one strand of a flexible material is a helical shape.

7. The vasoocclusive device of Claim 1, wherein said at least one strand of a flexible material is a wire.

8. The vasoocclusive device of Claim 1, wherein said flexible material comprises an alloy of titanium and nickel.

9. The vasoocclusive device of Claim 1, wherein said flexible material comprises a metal selected from the group consisting of platinum, palladium, rhodium, gold, tungsten, and alloys thereof.

10. The vasoocclusive device of Claim 1, wherein said vasoocclusive device is formed from at least one flexible strand of a resilient radiopaque material to provide a radiopaque marker of the deployed configuration of a device made of the strand during vascular surgery.

11. The vasoocclusive device of Claim 10, wherein said radiopaque strand comprises an alloy selected from the group consisting of platinum, tungsten and gold.

12. The vasoocclusive device of Claim 1, wherein said at least one strand comprises a super-elastic material.

13. The vasoocclusive device of Claim 12, wherein said super-elastic material comprises a nickel-titanium alloy.

14. The vasoocclusive device of Claim 1, wherein said at least one strand comprises a shape memory material.

15. The vasoocclusive device of Claim 14, wherein said shape memory material comprises a nickel-titanium alloy.

16. The vasoocclusive device of claim 1, wherein the anchor portion is formed to reinforce the vessel in the vicinity of the damaged portion of the vasculature to be treated.

17. A vasoocclusive device that is adapted to be inserted into a portion of a vasculature for occluding a portion of the vasculature for use in interventional therapy and vascular surgery, comprising:

at least one strand of a flexible material formed to have a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable configuration having an anchor segment loaded into the adjacent artery and a coil segment for framing or occluding the desired part of the vasculature to be treated, said operable configuration including a first portion configured to frame or occlude a part of the vasculature to be treated and a second non-linear portion configured to engage an

artery wall for securing the occluding device in the artery system of the vasculature; and

wherein said anchor portion is formed to reinforce the vessel in the vicinity of the damaged portion of the vasculature to be treated.

18. The vasoocclusive device of Claim 17, the second operable configuration having an anchor segment further comprises at least one extending loop, the extending loop being curved about a longitudinal axis to form a hollow cylindrical circumferential pattern of loops about the longitudinal axis to provide a contact surface area to anchor the occluding portion of the device adjacent the artery system of the vasculature to be treated.

19. The vasoocclusive device of Claim 17, wherein the second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable configuration consisting of a coil segment further comprising, a coiled shape for filling and reinforcing the desired part of the vasculature when the vasoocclusive device is implanted at the site in the vasculature to be treated.

20. The vasoocclusive device of Claim 17, further comprising a second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable, substantially helical coil shape for filling and reinforcing the desired portion of the vasculature when the vasoocclusive device is implanted at the site in the vasculature to be treated.

21. The vasoocclusive device of Claim 17, wherein said at least one strand of a flexible material is a helical shape.

22. The vasoocclusive device of Claim 17, wherein said at least one strand of a flexible material is a wire.

23. The vasoocclusive device of Claim 17, wherein said flexible material comprises an alloy of titanium and nickel.

24. The vasoocclusive device of Claim 17, wherein said flexible material comprises a metal selected from the group consisting of platinum, palladium, rhodium, gold, tungsten, and alloys thereof.

25. The vasoocclusive device of Claim 17, wherein said vasoocclusive device is formed from at least one flexible strand of a resilient radiopaque material to provide a radiopaque marker of the deployed configuration of a device made of the strand during vascular surgery.

26. The vasoocclusive device of Claim 25, wherein said radiopaque strand comprises an alloy selected from the group consisting of platinum, tungsten and gold.

27. The vasoocclusive device of Claim 17, wherein said at least one strand comprises a super-elastic material.

28. The vasoocclusive device of Claim 27, wherein said super-elastic material comprises a nickel titanium alloy.

29. The vasoocclusive device of Claim 17, wherein said at least one strand comprises a shape memory material.

30. The vasoocclusive device of Claim 29, wherein said shape memory material comprises a nickel-titanium alloy.

31. The vasoocclusive device of Claim 17, wherein the second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable configuration having an anchor portion loaded into the adjacent artery and a coil segment, further comprising an inner reinforcement member extending through the coil segment and the anchor portion to reinforce the anchor segment.

32. The vasoocclusive device of Claim 17, wherein the second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable configuration having an anchor portion loaded into the adjacent artery and a coil segment, further comprising an inner reinforcement member extending through the anchor portion to reinforce the anchor segment.

33. The vasoocclusive device of Claim 31, wherein said inner reinforcement member is fixedly attached at the anchor portion of the vasoocclusive device.

34. The vasoocclusive device of Claim 31, wherein said reinforcement member is a coil shape.

35. The vasoocclusive device of Claim 31, wherein the reinforcement member is helically wound opposite the formed flexible material.

36. The vasoocclusive device of Claim 31, wherein the reinforcement member is formed of a ribbon.

37. The vasoocclusive device of Claim 31, wherein the reinforcement portion is formed of a wire.

38. The vasoocclusive device of Claim 31, wherein the reinforcement portion is formed of a tapered wire.

39. The vasoocclusive device of Claim 31, wherein said inner reinforcement member further comprises transverse loops.

40. A vasoocclusive device that is adapted to be inserted into a portion of a vasculature for occluding a portion of the vasculature for use in interventional therapy and vascular surgery, comprising:

at least one strand of a flexible material formed to have a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable configuration for framing or occluding the desired site of the vasculature to be treated, said operable configuration including a first portion configured to frame or occlude a part of the vasculature to be treated and a second non-linear portion configured to engage an artery wall for securing the occluding device in the artery system of the vasculature, wherein the operable configuration for framing or occluding the desired site of the vasculature further comprises at least one extending loop to anchor the occluding portion of the device in the artery system of the vasculature.

41. The vasoocclusive device of Claim 40, further comprising a second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable, coiled shape for filling and reinforcing the desired portion of the vasculature when the vasoocclusive device is implanted at the site in the vasculature to be treated.

42. The vasoocclusive device of Claim 40, further comprising a second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a

and through a catheter to a desired portion of the vasculature to be treated, and a second operable, substantially spherical configuration for occluding at least a portion of said vasculature to be treated, said substantially spherical configuration having about 90% of said strand in about the outer 15% of the diameter of said substantially spherical configuration.

43. The vasoocclusive device of Claim 40, further comprising a second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable, substantially helical coil shape for filling and reinforcing the desired portion of the vasculature when the vasoocclusive device is implanted at the site in the vasculature to be treated.

44. The vasoocclusive device of Claim 40, wherein said at least one strand of a flexible material is a helical shape.

45. The vasoocclusive device of Claim 40, wherein said at least one strand of a flexible material is a wire.

46. The vasoocclusive device of Claim 40, wherein said flexible material comprises an alloy of titanium and nickel.

47. The vasoocclusive device of Claim 40, wherein said flexible material comprises a metal selected from the group consisting of platinum, palladium, rhodium, gold, tungsten, and alloys thereof.

48. The vasoocclusive device of Claim 40, wherein said vasoocclusive device is formed from at least one flexible strand of a resilient radiopaque material to provide a radiopaque marker of the deployed configuration of a device made of the strand during vascular surgery.

49. The vasoocclusive device of Claim 40, wherein said at least one strand comprises a super-elastic material.

50. The vasoocclusive device of Claim 49, wherein said super-elastic material comprises a nickel titanium alloy.

51. The vasoocclusive device of Claim 40, wherein said at least one strand comprises a shape memory material.

52. The vasoocclusive device of Claim 51, wherein said shape memory material comprises a nickel-titanium alloy.

53. The vasoocclusive device of claim 40, wherein the anchor portion is formed to reinforce the vessel in the vicinity of the damaged portion of the vasculature to be treated.

54. A method for repairing a portion of a vasculature having a vasoocclusive deformity to restore physiologically normal flow to the portion of the vasculature to be treated, comprising the steps of:

moving a catheter through the vasculature and to the portion of the vasculature to be treated;

moving through said catheter a vasoocclusive device comprising at least one strand of a flexible material formed to have a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable configuration for framing or occluding the desired portion of the vasculature to be treated, and anchoring a portion of said second operable configuration of the device in the artery system of the vasculature.

55. The method of Claim 54, wherein said anchor portion comprises a plurality of extending loops along a longitudinal axis to thereby provide contact surface area for anchoring the occluding portion of the device in the artery system of the vasculature.